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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/554,905 | 07/26/2000 | Erland Sorensen | 9847-0048-6X | 6635 |
| 22850 | 7590 | 11/03/2003 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | MULLINS, BURTON S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2834 | |

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/554,905 | SORENSEN, ERLAND | |
| | Examiner | Art Unit | |
| | Burton S. Mullins | 2834 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-54 and 67 is/are rejected.
- 7) ☒ Claim(s) 55-66 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6,8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Suspension

1. Pursuant to the Board of Appeal's final decision regarding U.S. Application No. 08/973,019, suspension has been lifted. As set forth in the decision on petition requesting suspension, the instant application was granted a suspension pending the decision on appeal of the '019 application. On November 27, 2002, the Board affirmed the rejection of the '019 application and on August 27, 2003, the Board denied applicant's request for reconsideration, thus terminating prosecution of the '019 application. An action on the merits follows.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 33-43, 49-54 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elton et al. (US 4,853,565) in view of Thomas et al. (US 4,163,187). Elton teaches a multi-winding stator cable (Fig. 7) for high-powered dynamo-electric machines comprising: a conductor comprising plural strands 102, at least some of which are in electrical contact with one another; a first semi-conducting layer 104 surrounding the conductor; a solid insulating layer 106 surrounding the first semi-conducting layer; and a second semi-conducting layer 110 surrounding the insulating layer and connected to ground. Elton does not teach two vectorial quantities of flux, or that the machine is "directly connected" to a distribution or transmission network.

Regarding the former feature, Thomas teaches an alternator speed controller and method comprising two sets of stator exciter windings 17 and 18 (Figs.2-3) which provide variable speed operation of the generator and high maximum output (c.1, lines 1-10 & 39-52). The two windings are the two sources of flux in the stator.

It would have been obvious to one having ordinary skill in the art to modify the generator of Elton and provide dual windings per Thomas so as to improve the output and variable speed operation.

Regarding the latter feature, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, e.g., "direct connection" to a network, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Allowable Subject Matter

4. Claims 44-48 and 55-66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claim 44, the prior art does not teach an extra or auxiliary winding for generating the first flux vector, with the second flux vector generated by the two electrical windings. Thomas does not teach or suggest an auxiliary stator winding, or the details of controlling phase position, amplitude and speed relative to

another flux generated by the distribution network (claim 55); the details and equations governing the two vectorial quantities and machine/current fluxes of the ordinary and auxiliary windings (claim 65); or controlling at least two vectorial quantities using relative phase position and relative amplitude between an active current value and a reactive current value of an ordinary winding and an extra winding (claim 66).

Response to Arguments

5. Applicant's arguments filed 3 July 2002 have been fully considered but they are not persuasive. Applicant's primary argument is that Elton does not teach a cable used as a winding in an electric machine. This is not convincing because Elton teaches that the embodiments shown in Figs.1-7 are suitable for use in a dynamoelectric machine (abstract, lines 4-8). The cable of Fig.7 is disclosed as being a further embodiment of Figs.1-6, which are shown to be suitable for windings on a stator in a dynamo-electric machine (c.8, lines 26-38).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on 9-5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
October 29, 2003